

The new Engicam module for a wide range of applications such as machine vision, autonomous robots and factory automation. The SOM is based on RENESAS® RZ/V2H processor with AI accelerator (DRP-AI) with 8TOPS/dense, 80TOPS/sparse, GE3D 3D GPU. Aimed for powerful vision, machine automation and real-time processing.



FEATURES



	CPU	RENESAS® RZ/V2H
	CORES	4x Arm Cortex-A55 on-chip FPU, up to 1.8 GHz 2x Arm Cortex-R8 on-chip FPU, up to 800 MHz 1x Arm Cortex-M33 on-chip FPU, up to 200 MHz
	MEMORY	Up to 16 GB LDDR4x@3200MTs
	AI & GRAPHICS	- AI Accelerator DRP-AI3 (8TOPS/dense, 80TOPS/sparse) - Mali™-G31 (GE3D) - Mali™-C55 (ISP) - OpenGL ES™ 1.1, 2.0, and 3.2 - OpenCL 2.0
	VIDEO INTERFACES	1x MIPI-DSI 4-lane 4x MIPI-CSI 4-lane
	VIDEO PROCESSING	- H.265/H.264 decode and encode 1920 x 1080 @60 H.264 3840 x 2160 @30 H.265
	AUDIO	Serial Sound Interface
	NETWORKING	1x Gb Ethernet interface 1x RGMII i/f

HIGHLIGHTS

- Powerful RENESAS® RZ/V2H processor with AI accelerator and GPU
- Suitable for autonomous robots, machine vision and advanced graphics applications

APPLICATIONS



	USB	2x USB 3.2 1x USB 2.0 1x USB OTG 2.0
	MASS STORAGE	eMMC drive soldered on-board
	PERIPHERAL INTERFACES	UART, SPI, I²C, CAN Bus, GPIOs, JTAG
	PCIe	1x PCIe Gen3
	OPERATING SYSTEM	Linux Yocto
	POWER SUPPLY	+5V DC
	DIMENSIONS	35 x 55 mm
	OPERATING TEMPERATURE*	Extended Industrial qualified

* Valid for all components except CPU. Customer shall consider junction temperature for CPU. Temperature will widely depend on application. Specific cooling solutions could be necessary for the final system.

BLOCK DIAGRAM

